### N212345940 High Voltage Battery May Melt or Burn



Release Date: December 2021 Revision: 01

Revision Description: This bulletin has been revised to replace the service procedure with the advanced

diagnostic software using the sequential ZFA - Field Action Multimodule Coordinated Sequence programming. The customer letter has also been added. Please discard all

previous copies of bulletin N212345940.

#### Attention:

It is a violation of Federal law for a dealer to deliver a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by this notification under a sale or lease until the defect or noncompliance is remedied.

Vehicles involved in this recall were placed on stop delivery August 20, 2021.

The service procedure contained in this bulletin WILL NOT close the recall. The status of the VIN will remain "Incomplete, Remedy Not Available" in the Investigate Vehicle History (IVH) in Global Warranty Management even after the completion of the service procedure. Even so, dealers should submit warranty claims for affected vehicles after the procedure in this bulletin is successfully completed.

All involved vehicles that are in dealer inventory must be held and not delivered to customers, dealer traded, or used for demonstration purposes even after the procedure in this bulletin is completed.

This recall must only be completed by Chevrolet EV certified dealers who have met all Bolt recall specific training, tool and equipment requirements. Repairs must be performed by a technician who has successfully completed the required training.

		Model Year		Model Year			
Make	Model	From	То	RPO	Description		
Chevrolet	Bolt EV	2020	2022				
	Bolt EUV	2022	2022				

Involved vehicles are marked "Incomplete, Remedy Not Available" on the Investigate Vehicle History screen in GM Global Warranty Management system. This site should always be checked to confirm vehicle involvement prior to beginning any required inspections and/or repairs. Even so, dealers should submit warranty claims for affected vehicles after the service procedure in this bulletin is successfully completed.

Condition	General Motors has decided that a defect which relates to motor vehicle safety exists in 2020-22 model year Chevrolet Bolt EV and 2022 model year Chevrolet Bolt EUV vehicles. The high voltage batteries in some vehicles may pose a risk of fire when charged to full, or very close to full, capacity.
Correction	Dealers will replace defective battery modules in the recall population. Until the updated recall remedy is performed, dealers will update the software on the Hybrid/EV Powertrain Control Module 2 (HPCM2), Battery Energy Control Module (BECM), and Body Control Module (BCM) using the ZFA - Field Action Multimodule Coordinated Sequence.

#### **Parts**

No Parts Required

#### **Warranty Information**

Labor Operation	Description	Labor Time	Trans. Type	Net Item
	Reprogram using ZFA - Field Action Multimodule Coordinated			
9105957	Sequence	1.0	ZFAT	N/A
	ADD: SOC Depletion to 80%	0.3		

Important: The battery state of charge will be limited to 80% with updated software upon completion of this procedure.

#### **Service Procedure**

Perform the following steps BEFORE reprogramming the vehicle.

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**Important:** Verify the vehicle SOC is less than 80%. This can be determined by looking at the bars on the power level indicator. If four or more empty bars (not showing green) are displayed, the SOC is at an acceptable level. If the power level indicator shows an SOC of greater than 80% The SOC must be adjusted before proceeding with the recalibration.

**Caution:** During this procedure, a puddle of water may form around the vehicle from HVAC system drainage. Use care to prevent any slip/fall conditions.

**Note:** Each hour of operation will reduce SOC by about 10%. Left unattended, the vehicle will automatically turn OFF after 2 hours. This procedure must be performed in a secure location because the vehicle is in a drivable condition. Take proper steps to ensure no unauthorized drivers have access to the vehicle.

#### If required, reduce the SOC as follows:

- Vehicle in PARK, Vehicle ON.
- Headlamps Low Beam: ON.
- Temp Control: Hi (Max Heat High) (note: windows should be down).
- Distribution: MAX Defrost (Engages AC Compressor).
- Fan Speed: High (8).
- Select: Fresh Air (Not recirc).
- Select: Heat & A/C .
- If equipped, turn heated seats to hi position.
- Verify SOC after 60 minutes. If the SOC is still greater than 80%, allow additional time for the loads listed above to reduce the SOC to less than 80%.
- When the SOC adjustment is completed return the HVAC controls to 72 Deg. AUTO, Set the headlamp control
  to AUTO.

#### **Programming**

Note: Carefully read and follow the instructions below.

- Ensure the programming tool is equipped with the latest software and is securely connected to the data link connector. If there is an interruption during programming, programming failure or control module damage may occur.
- Stable battery voltage is critical during programming. Any fluctuation, spiking, over voltage or loss of voltage will
  interrupt programming. Install a GM Authorized Programming Support Tool to maintain system voltage. Refer to
  www.gmdesolutions.com for further information. If not available, connect a fully charged 12 V jumper or booster
  pack disconnected from the AC voltage supply. DO NOT connect a battery charger.
- Follow the on-screen prompts regarding ignition power mode but ensure that anything that drains excessive power (exterior lights, HVAC blower motor, etc.) is off.

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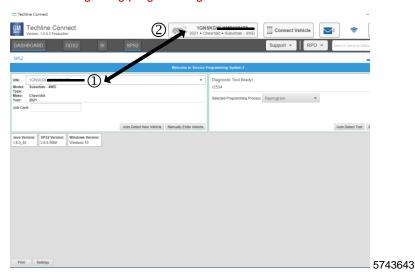
 Clear DTCs after programming is complete. Clearing powertrain DTCs will set the Inspection/Maintenance (I/M) system status indicators to NO.

Important:

The service technician always needs to verify that the VIN displayed in the TLC left side drop down menu and the top center window match the VIN plate of the vehicle to be programmed prior to using Service Programming System 2 (SPS2) for programming or reprogramming a module.

- For the TLC application, service technicians need to always ensure that the power mode (ignition) is "ON" before reading the VIN from the vehicle's VIN master module and that they do not select a VIN that is already in the TLC application memory from a previous vehicle.
- If the VIN that shows up in the TLC top center window after correctly reading the VIN from the vehicle does not
  match the VIN plate of the vehicle, manually type in the VIN characters from the vehicle VIN plate into the TLC
  top center window and use these for programming or reprogramming the subject module with the correct vehicle
  VIN and software and/or calibrations.

**Caution:** Be sure the VIN selected in the drop-down menu (1) is the same as the vehicle connected (2) before beginning programming.



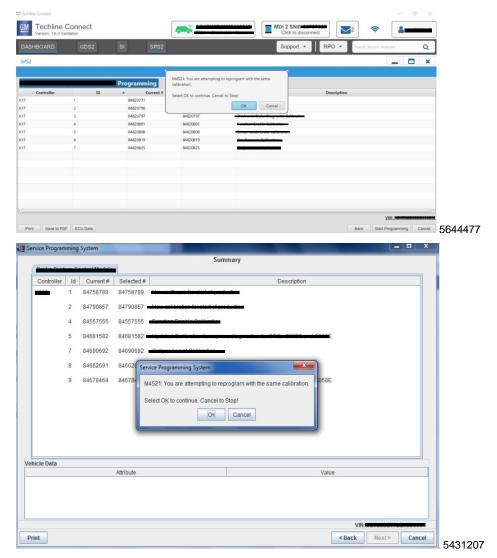
**Important:** If the vehicle VIN DOES NOT match, the message below will be shown.



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Important: Techline Connect and TIS2WEB screens shown above.

Important:

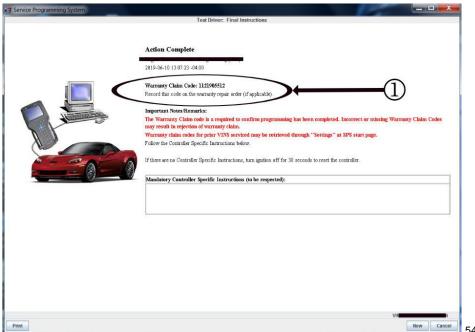
If the same calibration/software warning is noted on the TLC or SPS Summary screen, select OK and follow screen instructions. After a successful programming event, the WCC is located in the Service Programming System dialogue box of the SPS Summary screen. No further action is required. Refer to the Warranty section of the bulletin.



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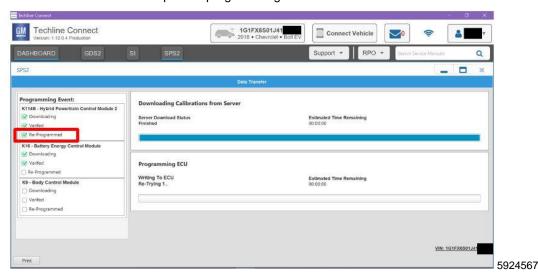


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**Note:** The screenshots above are an example of module programming and may not be indicative of the specific module that is being programmed. Module selection and VIN information have been blacked out.

**Important:** To avoid warranty transaction rejections, you MUST record the warranty claim code provided on the Warranty Claim Code (WCC) screen shown above on the job card. Refer to callout 1 above for the location of the WCC on the screen.

 Reprogram the multiple modules through SPS/Techline Connect (SPS and Techline Connect screens shown) by selecting "ZFA – Field Action Multimodule Coordinated Sequence" on the select controller screen and select "Programming" for the Select Function/Sequence". Select "Next" and follow all on screen instructions. In SPS, scroll down to view all instructions prior to programming.



Note: The ZFA - Field Action Multimodule Coordinated Sequence must be used. The first module in the sequence is the K114B HPCM2 which is programmed with Ignition OFF and the brake pedal depressed to keep communications awake. The second module in the sequence is the K16 BECM, which is programmed with Ignition ON/Propulsion OFF. The third module is the K9 BCM is also programmed with Ignition ON/Propulsion OFF. Sequential programming may SKIP some modules if they already have the latest available calibration.

**Note**: Failure to make the transition to Ignition ON/Propulsion OFF <u>may</u> result in having to restart the sequential programming.

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- 2. Remain in the vehicle with the brake pedal depressed during the programming of the K114B HPCM2. When the green check mark indicates the K114B HPCM2 has been re-programmed, as shown in the image, release the brake pedal and transition to Ignition ON/Propulsion OFF.
- 3. After programming has fully completed, clear DTCs. Let the vehicle sleep for 1 minute after removing the MDI, powering OFF, and closing all doors.

#### Dealer Responsibility - For USA & Export (USA States, Territories, and Possessions)

It is a violation of Federal law for a dealer to deliver a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by this notification under a sale or lease until the defect or noncompliance is remedied.

The US National Traffic and Motor Vehicle Safety Act provides that each vehicle that is subject to a recall of this type must be adequately repaired within a reasonable time after the customer has tendered it for repair. A failure to repair within sixty days after tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within a reasonable time, the customer may be entitled to an identical or reasonably equivalent vehicle at no charge or to a refund of the purchase price less a reasonable allowance for depreciation. To avoid having to provide these burdensome remedies, every effort must be made to promptly schedule an appointment with each customer and to repair their vehicle as soon as possible. In the recall notification letters, customers are told how to contact the US National Highway Traffic Safety Administration if the recall is not completed within a reasonable time.

#### **Dealer Responsibility** – All

All new, used, GM Certified Used, courtesy transportation vehicles, dealer shuttle vehicles, etc. in dealers' possession are subject to this recall. Involved vehicles must be held and not delivered to customers, dealer-traded, released to auction, used for demonstration, or any other purpose.

All GM Certified Used vehicles currently in the dealers' inventory within the Certified Pre-Owned Inventory System (CPOIS) will be de-certified and must be held until the final remedy is completed. Upon submitting an accepted/paid warranty transaction in the Global Warranty Management (GWM) system, the vehicle is not re-certified for sale within the CPOIS system, and cannot be used in the CTP program.

Dealers are to service all vehicles subject to this recall at no charge to customers, regardless of mileage, age of vehicle, or ownership, from this time forward.

Customers who have recently purchased vehicles sold from your vehicle inventory, and for which there is no customer information indicated on the dealer listing, are to be contacted by the dealer. Arrangements are to be made to make the required correction according to the instructions contained in this bulletin. Recall follow-up cards should not be used for this purpose, since the customer may not as yet have received the notification letter.

In summary, whenever a vehicle subject to this field action enters your vehicle inventory you must take the steps necessary to ensure the program correction has been made before selling the vehicle. In addition, for vehicles entering your facility for service, you are required to ensure the customer is aware of the open field action and make every reasonable effort to implement the program correction as set forth in this bulletin prior to releasing the vehicle.

#### **Dealer Reports**

For dealers with involved vehicles, a listing has been prepared and will be available through GM GlobalConnect Maxis Field Action Reports or sent directly to export dealers. The Inventory tab of the dealer reports will contain VINs that apply to this recall. This information is intended to assist dealers with the **PROMPT COMPLETION** of these vehicles. The Customer In-Service tab will contain customer names and addresses from Motor Vehicle Registration Records. The use of such motor vehicle registration data for any purpose other than follow-up necessary to complete this recall may be a violation of law in several states.

#### Courtesy Transportation - For USA & Canada

Courtesy transportation is available for customers whose vehicles are involved in this safety recall.

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#### **Customer Notification**

USA & Canada - General Motors will notify customers of this recall on their vehicle.

Export - Letters will be sent to known owners of record located within areas covered by the US National Traffic and Motor Vehicle Safety Act.

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the tools, equipment, safety instructions, and know-how to do a job properly and safety. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your dealer for information on whether your vehicle may benefit from the information.



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December 2021

This notice applies to your vehicle, VIN: _	 	
Dear General Motors Customer:		

Thanks again for your continued patience as the team at Chevrolet works as quickly as we can to provide you with replacement battery modules for your Bolt EV or Bolt EUV. Battery replacements have begun, and we continue to work with our battery supplier to obtain more battery modules to help speed up the replacement process.

We are pleased to inform you that we have developed an advanced diagnostic software package that will remove parking and charging limitations on your 2020-2022 model year Chevrolet Bolt EV or 2022 model year Bolt EUV vehicle while we work on building replacement battery modules. This software will automatically limit your vehicle's maximum state of charge to 80%, which will allow you to safely resume:

- · charging indoors overnight;
- depleting your vehicle's battery below 70 miles (113 km) of range, resulting in greater overall vehicle range compared to GM's prior interim charging guidance; and
- parking indoors after charging.

This software also contains new diagnostics designed to detect specific abnormalities that might indicate a rare battery issue in your vehicle.

THIS SOFTWARE IS NOW AVAILABLE FOR YOUR 2020-2022 model year Chevrolet Bolt EV or 2022 Chevrolet Bolt EUV vehicle. Schedule a service appointment at your preferred Chevrolet EV dealer to have the software installed. The service should take approximately 1-3 hours to complete. Until you have the software installed, we ask that you still follow our previous guidelines, which are outlined on our website: www.chevy.com/boltevrecall. THIS SOFTWARE IS NOT THE FINAL RECALL REMEDY and you will be notified when battery modules are available for replacement.

Once again, we appreciate your patience and understanding. If you have any questions, please contact the Chevrolet EV Concierge 1-833-EVCHEVY or your preferred Chevrolet EV dealer.

Steve Hill

Vice President

Chevrolet

GM Recall: N212345940